

CAMELINA RUMELICA, ANOTHER WEEDY MUSTARD
ESTABLISHED IN NORTH AMERICA

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While collecting in southcentral Kansas and northcentral Oklahoma during the spring of 1983 I frequently found a Camelina sp. growing in wheat fields, along roads, in grazed prairie pastures, and waste places. It differed from C. microcarpa Andr. ex DC. in having petals 6-9 mm long and pure white at anthesis, lower stem densely pilose-hirsute with simple hairs 2-3.5 mm long, rosette leaves usually still present at early anthesis, chromosome number $n=6$, and well-grown plants more branched. Like C. microcarpa, the plants are usually winter annuals.

Eventually I determined this rather conspicuous plant to be C. rumelica Velen., a native of southern and eastcentral Europe, and could not find it reported for North America. Prof. Reed C. Rollins, of Harvard University, confirmed my determination and I thank him for his assistance.

It was apparent that C. rumelica was well established over a several county area. Farmers in the vicinity recognized it as different from C. microcarpa, somewhat more noxious, and two said it had been around for a long time. I found C. rumelica in pure colonies and mixed with C. microcarpa though the latter species was more common in the area.

The prevalence of C. rumelica suggested that it had been around for some time and earlier collections possibly incorrectly identified as C. microcarpa. A study of Camelina specimens in regional herbaria (COLO, CS, DUR, IA, ISC, KSC, KANU, MIN, MO, NDA, NEB, NMC, OKL, OKLA, SDC, SDU, SMU, TAES, TEX, UARK, UMO; I thank the Curators for their assistance) revealed this to be true.

The first collections appear to be OKLAHOMA: Woods Co., bad weed in wheat fields, 30 Apr 1932, Charles Stiles s.n. (MO); Kingfisher Co., 2 mi E Kingfisher, 15 Apr 1937, Jack Engleman 1380 (OKL); near Kingfisher, wheat fields, 21 Apr 1937, R.C. Outhier s.n. (TEX). KANSAS: Stafford Co., near Macksville, abundant in wheat field, May 1947, Don Gibson s.n. (KSC). TEXAS: Denton Co., 1.3 mi N Aubrey, along railroad, locally abundant, 9 Apr 1953, Lloyd H. Shinnars 14098 (SMU); Wise Co., 5.2 mi SE Bridgeport, along railroad fill, locally abundant, 27 Mar 1953, Lloyd H. Shinnars 13857 (OKLA, SMU, TAES, UARK). COLORADO: Kiowa Co., 2 mi N Eads, sandy sagebrush pasture, common, 25 May 1973, Steve Stephens 64712 (KANU); Montrose Co., 1.3 mi N turnoff to Black

Canyon National Monument, off U.S. Hwy. 50, roadside weed, petals white, 28 May 1979, Reed C. and Kathryn W. Rollins 7989 (GH). Prof. Reed C. Rollins (pers. com.) reports this latter sheet was the only one in the Gray Herbarium from North America. OREGON: Deschutes Co., 8 mi SE of jct. of hwy. 20 and 28 on Hwy. 20, on barren flats in juniper-Chrysothamnus-Purshia-sagebrush association, 3 Jul 1950, A.R. Kruckeberg 2069 (COLO).

Other collections of C. rumelica found are:

KANSAS: Barber Co., McGregor 34261; Chautauqua Co., Ralph E. Brooks 12915; Clark Co., McGregor 32941; Comanche Co., McGregor 34209; Harper Co., McGregor 34308; Kingman Co., McGregor 34312; Kiowa Co., Steve Stephens 83670; Logan Co., Steve Stephens 64588; Pratt Co., Janet E. Bare 2232, Ralph E. Brooks 16667, McGregor 34247; Reno Co., McGregor 34243 (all KANU).

OKLAHOMA: Alfalfa Co., McGregor 34298 (KANU); Cleveland Co., George J. Goodman 7097 (SMU, OKL); Cotton Co., Ricky Sellers 114 (DUR); Grady Co., Robert Pearce 1115 (KSC, OKL, SMU); Grant Co., McGregor 34299 (KANU); Harper Co., John & Connie Taylor 31409 (DUR); Love Co., Curtis Clark & Ethen Perkins 112 (OKL); Major Co., Sue Young 40 (OKL); John & Connie Taylor 15910 (DUR); Muskogee Co., Charles Wallis 3524 (OKLA); Pontotoc Co., Doyle McCoy 3162 (OKLA); Tillman Co., V. Watson 54 (DUR); Woods Co., P. Nighswonger 932 (OKL), Tim Springer 143 (OKL), John Taylor 28790 (DUR), McGregor 34280 (KANU); Woodward Co., Steve Stephens 74758 (KANU).

TEXAS: Hemphill Co., Charles Wallis 8663 (OKLA).

The only other Camelina species which have been collected in the plains region are C. alyssum (Mill.) Thell. and C. sativa (L.) Crantz. The former from North and South Dakota with last collection being North Dakota: Dickey Co., 23 Jun 1950, C.K. Dike s.n. (NDA). Camelina sativa has been collected from Kansas and Missouri northward with the last collection being North Dakota: Ward Co., Minot, wheat field, 22 Jun 1930, Olga Lakela 472 (MIN).

In recent years some Camelina specimens from Oklahoma northward have been annotated as C. sativa. Such plants have the lower stem with a few to many short branched hairs and longer simple ones absent to sparse. The fruit and seed characters are, however, those of C. microcarpa. In many populations of C. microcarpa stem pubescence varies considerably and its use as a diagnostic character must be used with caution.